

METHODS AND APPARATUS FOR DYNAMICAL
HELICAL SCANNED IMAGE PRODUCTION

ABSTRACT OF THE DISCLOSURE

Some configurations of the present invention thus provide a method for producing images of an object. The method includes dynamically helically scanning an object on a moving table utilizing a scanning imaging system. During the scan, projection views of the object are acquired and stored together with corresponding table locations. A plane for reconstruction of an image of the object is selected. The stored table locations are used to determine geometric variables applicable to the stored projection views; and the stored projection views are filtered and backprojected utilizing the geometrical variables to reconstruct an image of the object at the reconstruction plane.